## Montana DEQ Forest Fire Smoke Advisory July 20 2007 10:00 AM Friday

## **Current Situation**

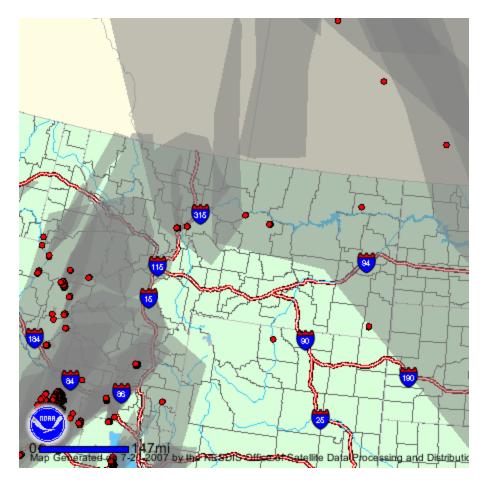
Smoky skies are the rule this morning with smoke streaming north from fires in Oregon, Idaho and Utah across the Big Sky state and into Canada. MODERATE levels are present at the surface at several reporting stations including Missoula, Hamilton, Helena and Butte. UNHEALTHY levels are worse are expected in the vicinity of the active fires this morning. More smoke will mix down to the surface later this morning and increase fire activity this afternoon will drive smoke into communities downwind of the local fires as well. See the forecast below for details. Residents near active fires or experiencing noticeable smoke levels should use the VISIBILITY GUIDELINES to determine smoke levels in their area and guide their activity decisions.

Morning satellite photo centered on Great Falls:

G-11 IMG 20 JUL 07 TIME=13:00UTC RES=01.00KM NWS/WR-SSD

20002 G-11 IMG 1 20 JUL 07201 130000 03277 17488 01.00

This morning's analysis from NOAA's satellite services division shows the active fires in Montana and the smoke plumes combining and spreading downwind(the analyzed smoke is based on yesterday's satellite coverage, the fire detects are based on last nights satellite coverage)



Red indicates hot spot detected. Grey represents smoke seen by satellite. Fire size is exaggerated for visibility at this scale

To identify individual fires on graphic above go here:

http://activefiremaps.fs.fed.us/lg\_fire2.php

Real time particulate information is currently available in most of the larger urban areas from several different sources including: DEQ run PM-10 BAMS and PM2.5 BAMS, NWS ASOS visibility monitors, and USFS remote access Nephelometers and BAMS.

This morning's smoke report is below, comparing particulate levels where we have information to MDEQ's Forest Fire health advisory levels.

http://www.deq.state.mt.us/FireUpdates/SmokeCategories.asp

## **Updated 10 AM July 20, 2007**

Locations and severity of forest fire smoke reports since midnight of the date above at reporting stations.

HAZARDOUS	
VERY UNHEALTHY	
UNHEALTHY	
UNHEALTHY FOR SENSITIVE GROUPS	
MODERATE	Missoula T24 Hamilton T24 Helena T24 Butte T8

T1(x) One-hour TEOM or BAM value (number of values)

T8(x) Eight-hour average TEOM or BAM value(number of values)

T24 24 hour average TEOM or BAM value

Vis(x) Visibility value(number of hours)

Vis(am/pm) Visibility value from twice/day reporting stations

(est) estimate

Local impacts in areas immediately adjacent to active fires are expected to exceed some or all of the advisory levels. DEQ recommends the use of local visibility guidelines

http://www.deq.state.mt.us/FireUpdates/VisibilityRanges.asp

to evaluate possible health risks and make informed activity decisions.

## Forecast

More hot and dry air from the south will continue to push into the state today. Overall upper transport winds will stay from the south-southwest throughout the day and smoke from Idaho, Oregon and Utah will continue to provide hazy skies and smoke aloft throughout the state for the rest of the day. Some of that smoke will mix down to the surface later this morning for some temporarily noticeable surface impacts under the thickest parts of the plume aloft. Local impacts from the active fires in the state will also be of concern today. Low speed lower level winds will start out from the north early this morning, sending smoke in Helena from the Wolf Creek fires and the fires in the Bob Marshall wilderness. These winds will switch to the west in North Central Montana this afternoon sending smoke out into the Front Range area and into Great Falls. Winds in Helena should switch around to the south this afternoon and surface impacts there should improve after noon. Dispersion this afternoon will be excellent with high mixing heights and moderate to strong winds. This should prevent any buildup of smoke but local impacts are still likely. Smoke from the Pattengail Creek fire northeast of Wisdom could impact the Anaconda-Butte-Helena area later this afternoon and evening if the fire there takes off this afternoon. Areas downwind of active fires could see significant impacts if fire levels increase dramatically. With the excellent mixing the plumes will mix down to the surface miles downwind of the fires. Residents near active fires need to remain aware of current conditions and use the visibility guidelines:

http://www.deq.state.mt.us/FireUpdates/VisibilityRanges.asp

to guide their activity decisions as the situation changes.

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